



# FUJIAN YAHENG POWER TECHNOLOGY GROUP CO.,LTD



## 6GFM120 12V120AH

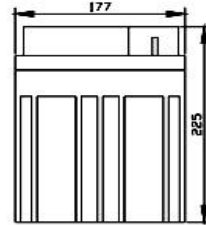
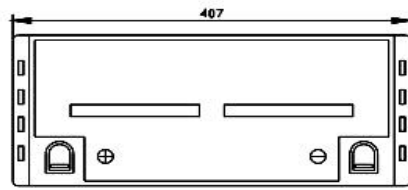
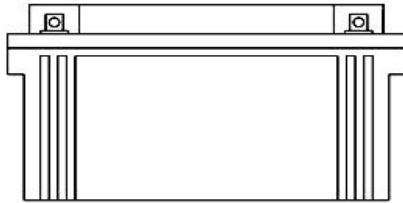
6GFM120 is a general purpose battery with 15 years floating design life, meet with IEC,JIS standard. With heavy duty grid thickness plates, special additives, FM series battery have long and reliable standby service life.

### Specification

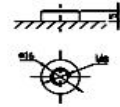
Cells Per Unit	6
Voltage Per Unit	12V
Capacity	120AH@10hr-rate to 1.75V per cell @ 25°C
Weight	Approx. 35kg (Tolerance±3%)
Max. Discharge Current	1200A(5sec)
Internal Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25±5°C
Float Charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging	36.0A Current Limit
Equalization and Cycle service	14.6 to 14.8 VDC /unit Average at 25°C
Self Discharge	YAHENG Vale Regulated Lead Acid(VRLA) Can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using
Terminal	Terminal F12/L20
Container Material	A.B.S. UL94-HB, Flammability resistance of UL94-V2 can be avail upon request

### Dimensions

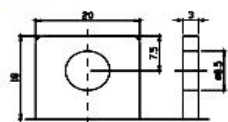
Unit: mm Dimension: 407(L)×177(W)×225(H)



Terminal F12



Terminal F5



### Constant Current Discharge Characteristics: A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	365.5	266.8	217.7	135.2	78.00	46.67	32.26	26.44	21.64	14.91	12.60	6.93
10.0V	355.0	253.8	213.2	133.0	77.64	46.32	32.14	26.32	21.51	14.78	12.48	6.81
10.2V	344.5	244.9	209.9	131.8	76.92	45.97	31.89	26.19	21.39	14.66	12.36	6.68
10.5V	309.3	226.0	199.8	128.5	76.20	45.62	31.77	25.95	21.13	14.54	12.24	6.55
10.8V	279.2	206.1	184.2	122.9	74.40	44.80	30.90	25.34	20.75	14.30	12.12	6.43
11.1V	238.4	184.2	165.2	115.1	70.68	42.81	29.54	24.11	19.86	13.69	11.76	6.05

### Constant Power Discharge Characteristics: W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	3781	2841	2395	1541	901.3	550.1	383.9	315.1	258.2	178.0	150.6	83.11
10.0V	3706	2754	2356	1522	899.2	547.2	384.0	314.7	257.5	177.1	149.7	81.67
10.2V	3664	2681	2330	1512	892.2	543.9	382.3	314.1	256.6	176.0	148.3	80.16
10.5V	3336	2497	2222	1476	884.2	540.0	380.9	311.1	253.6	174.5	146.9	78.65
10.8V	3038	2302	2054	1415	867.9	533.1	370.5	304.0	249.0	171.6	145.4	77.13
11.1V	2669	2081	1849	1329	830.7	513.3	354.5	289.4	238.3	164.3	141.1	72.60

All mentioned values are average values.



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## Temperature and Valid Capacity



## Discharge Characteristics at Various Rates @25°C/77



## Charge characteristic curve for standby use



## Storage characteristic



## Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.75V	1.60V
Discharge Current (A)	$A \leq 0.2C$	$0.2C \leq A \leq 1.0C$	$\geq 1.0C$

Charge the batteries at least once every six months, if they are stored at 25°C

Charging Method:

Constant Voltage	$-0.2C * 2h + 2.4 - 2.45V/cell * 24h$ , Max.Current 0.3CA
Constant Current	$-0.2C * 2h + 0.1CA * 12h$
Fast	$-0.2C * 2h + 0.3CA * 4.0h$

## Maintenance & Cautions

### Float Service

- ✘ Every month, recommend inspection every battery voltage
  - ✘ Every three months, recommend equalization charge for one time.
- Equalization charge method:
- Discharge: 100% rate capacity discharge.
- Charge: Max. Current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h
- ✘ Effect of temperature on float charge voltage: -3mV/Cell.
  - ✘ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.

## Contact us:

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